

Alpha Resources LLC

Safety Data Sheet Issue Date: 06/02/2021

SECTION 1 Identification

Product Identifier	
Product Name	NICKEL (ACCELERATORS, CAPSULES, PLUGS, BOATS, POWDERS, AND BASKETS)
Chemical Name	Nickel
Part Numbers	AEB1007, AED6000, AND3500, AR567, AR568, AR569, AR569-250, AR598, AR599, AR943,
	AR1951, AR2059, AR2183, AR2190, AR2343, AR2344, AR2345, AR4101, AR4113, AR4114,
	AR4181, AR5430, AR8599, AR9001, AR9002
Chemical Formula	Ni
CAS Number	7440-02-0

Company Information

Registered Company Name	Alpha Resources LLC
Address	3090 Johnson Road, Stevensville, MI 49127 United States
Telephone	(800) 833-3083
Fax	(269) 465-3629
Website	https://www.alpharesources.com
Email	sales@alpharesources.com

Emergency Phone Number

Association / Organization	CHEMTREC
Emergency Telephone No.	(800) 424-9300

SECTION 2 Hazard(s) Identification

This product is considered an article and does not pose any health hazard under normal laboratory use. The health effects listed below may be relevant when dust is generated during machining or other processing conditions.

Classification of the Substance or Mixture

NFPA 704 Diamond



Note: The hazard category numbers found in GHS classification in section 2 of this SDSs are NOT to be used to fill in the NFPA 704 diamond. Blue = Health, Red = Fire, Yellow = Reactivity, White = Special (Oxidizer or water reactive substances)

Classification	Skin Sensitizer Category 1, Chronic Aquatic Hazard Category 4, Specific target organ toxicity – repeated exposure Category 1, Carcinogenicity Category 2
Label Elements	
Hazard Pictogram(s)	
Signal Word	Danger

Hazard Statement(s)



H317	May cause an allergic skin reaction.
H413	May cause long lasting harmful effects to aquatic life.
H351	Suspected of causing cancer.
H372	Causes damage to organs through prolonged or repeated exposure.

Hazard(s) not Otherwise Classified

Not applicable

Precautionary Statement(s) Prevention

•	
P201	Obtain special instructions before use.
P260	Do not breathe dust / fume.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P281	Use personal protective equipment as required.
P270	Do not eat, drink, or smoke when using this product.
P273	Avoid release to the environment
P272	Contaminated work clothing should not be allowed out of the workplace.

Precautionary Statement(s) Response

IF exposed or concerned: Get medical advice/attention.	
Wash contaminated clothing before reuse.	
IF ON SKIN: Wash with plenty of water.	
Get medical advice/attention if you feel unwell.	
If skin irritation or rash occurs: Get medical advice/attention.	

Precautionary Statement(s) Storage

Not Applicable

Precautionary Statement(s) Disposal

P501 Dispose of contents/container to authorized hazardous or special waste collection point in accordance with any local regulation.

SECTION 3 Composition / Information on Ingredients

Substances

CAS No	%[weight]	Name
7440-02-0	>=99	nickel

SECTION 4 First-Aid Measures

Eye Contact	If this product comes in contact with the eyes:
	Wash out immediately with fresh running water.
	Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving
	the eyelids by occasionally lifting the upper and lower lids.
	> Seek medical attention without delay; if pain persists or recurs seek medical attention.
Skin Contact	If skin or hair contact occurs:
	Flush skin and hair with running water (and soap if available).
	Seek medical attention in event of irritation.
Inhalation	If fumes or combustion products are inhaled remove from contaminated area.



	 Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible
	prior to initiating first aid procedures.
	Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag valve mask device, or pocket mask as trained. Perform CPR if necessary.
	Transport to hospital, or doctor, without delay.
Ingestion	If swallowed, do NOT induce vomiting.
	If vomiting occurs, lean patient forward or place on left side (head-down position, if possible to maintain open airway and prevent aspiration.
	Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.
	Seek medical advice.

Most important symptoms and effects, both acute and delayed

See Section 11

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 Fire-Fighting Measures

Extinguishing Media

- **DO NOT** use halogenated fire extinguishing agents.
- Metal dust fires need to be smothered with sand, inert dry powders.
- **DO NOT** USE WATER, CO2 or FOAM.
- Use DRY sand, graphite powder, dry sodium chloride based extinguishers, G-1 or Met L-X to smother fire.

Special hazards arising from the substrate or mixture

Fire Incompatibility Reacts with acids producing flammable / explosive hydrogen (H2) gas.

Special protective equipment and precautions for fire-fighters

Fire Fighting	> Alert fire department and tell them location and nature of hazard.
0 0	> Wear breathing apparatus plus protective gloves in the event of a fire.
	> Prevent, by any means available, spillage from entering drains or water courses.
	> Cool fire exposed containers with water spray from a protected location.
Fire / Explosion Hazard	Does not represent unusual fire risk because the metal can conduct heat away from hot spots so efficiently that the heat of combustion cannot be maintained. Generally, metal fire risks exist when sawdust, machine shavings and other metal 'fines' are present.
	> Decomposition product include metal oxides.
	May emit poisonous fumes.
	May emit corrosive fumes.

SECTION 6 Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up



Minor Spills	Clean up waste regularly and abnormal spills immediately.
	Avoid breathing dust and contact with skin and eyes.
	Use dry clean up procedures and avoid generating dust.
	Place in suitable containers for disposal.
Major Spills	Control personal contact by wearing protective clothing.
	Prevent, by any means available, spillage from entering drains or water courses.
	Recover product wherever possible.
	IF DRY: Use dry clean up procedures and avoid generating dust. Collect residues and place in sealed plastic bags or other containers for disposal. IF MOLTEN: Control flow using dry sand as as a flow. Allow the applies and before resulting across
	or salt flux. Allow the spill to cool before remelting scrap. ➤ ALWAYS: Wash area down with large amounts of water and prevent runoff into drains.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 Handling and Storage

Precautions for safe handling

Safe Handling	Avoid all personal contact, including inhalation.
	Wear protective clothing when risk of exposure occurs.
	Store in a dry, cool environment that is well ventilated.
	Do not expose to air.
	> Avoid contact with incompatible materials.
	When handling, DO NOT eat, drink or smoke.
	Keep containers securely sealed when not in use.
	Always wash hands with soap and water after handling.

Conditions for safe storage, including any incompatibilities

Storage	Stable under normal laboratory conditions
Storage Incompatibility	Reacts with acids to produce hydrogen

SECTION 8 Exposure Controls / Personal Protection

Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
US NIOSH Recommended	Nickel	Nickel metal and other	0.015	Not	Not	Not Available
Exposure Limits (RELs)		compounds (as Ni)	mg/m3	Available	Available	
US OSHA Permissible	Nickel	Nickel, metal and insoluble	1 mg/m3	Not	Not	Ca; See Appendix A
Exposure Levels (PELs) –		compounds (as Ni)		Available	Available	[Note: The REL does not
Table Z1						apply to Nickel carbonyl.]
US ACGIH Threshold	Nickel	Nickel and inorganic	1.5	Not	Not	A5; BEI
Limit Values (TLV)		compounds including nickel	mg/m3	Available	Available	
		subsulfide, as Ni: Elemental				
		(Inhalable particulate matter)				

Emergency Limits

Ingredient	TEEL-1	TEEL-2	TEEL-3
Nickel	4.5 mg/m3	50 mg/m3	99 mg/m3

Ingredient	Original IDLH	Revised IDLH
Nickel	10 mg/m3	Not Available



Exposure Controls

Engineering Controls	Exhaust ventilation should be designed to prevent accumulation and recirculation in the workplace and safely remove dust from the air.
Eye and Face Protection	 Safety glasses with side shields. Chemical goggles.
	 Eye wash unit.
Skin and Body Protection	Protective over-garments or work clothing when machining.
Hand Protection	 Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of non-perfumed moisturizer is recommended. Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include frequency and duration of contact, chemical resistance of glove material, glove thickness, and dexterity. Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present: polychloroprene pixels where whether the protection and the bard here the protection and the bard or protection against undissolved.
	 nitrile rubber, butyl rubber, fluorocaoutchouc, and polyvinyl chloride. > Gloves should be examined for wear and/or degradation constantly.
Respiratory Protection	Particulate (AS/NZS 1716 & 1715, EN 143:2000 & 149:001, ANSI Z88 or national equivalent)

SECTION 9 Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	Solid shiny silver metal
Physical State	Solid
Odor	Odorless
Melting Point / Freezing Point (°C)	1455
Initial Boiling Point and Boiling Range (°C)	2730
Relative Density (Water = 1)	8.9
Molecular Weight (g/mol)	58.71

SECTION 10 Stability and Reactivity

Reactivity	See section 7
	Unstable in the presence of incompatible materials.
	Product is considered stable.
	Hazardous polymerization will not occur.
Possibility of Hazardous	See section 7
Reactions	
Conditions to Avoid	See section 7
Incompatible Materials	See section 7
Hazardous Decomposition	See section 5
Products	

SECTION 11 Toxicological Information

Information on toxicological effects



Inhaled	The material is not thought to cause respiratory irritation. Nevertheless, inhalation of dusts, or fumes, especially for prolonged periods, may produce respiratory discomfort and occasionally, distress.
Ingestion	The potential to generate small quantities of nickel chloride in the stomach may produce a low order toxic effect. Accidental ingestion of the material may be damaging to the health of the individual. Nickel is not well absorbed orally. Excretion in the urine is complete after about 4-5 days.
Skin Contact	The material is not thought to produce adverse health effects or skin irritation following contact. Open cuts, abraded or irritated skin should not be exposed to this material.
Еуе	Not thought to be an irritant, however, direct contact with the eye may cause transient discomfort. Slight abrasive damage may also result.
Chronic	 Warning: This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans Skin contact with the material is more likely to cause a sensitization reaction in some persons compared to the general population. Toxic: danger of serious damage to health by prolonged exposure through inhalation.
Nickel	Toxicity – Oral (Rat) LD50; >9000mg/kg Irritation – no adverse effects observed (not irritating)
A such a Tau date .	

Reproductivity OT – Single Exposure	x x
OT – Single Exposure	X
- Repeated Exposure	V
Aspiration Hazard	X
	Aspiration Hazard the criteria for classific

√ - Data available to make classification.

SECTION 12 Ecological Information

Toxicity

Endpoint	Test Duration (hr)	Species	Value	Source
EC50(ECx)	72	Algae or other aquatic plants	0.18 mg/L	1
LC50	96	Fish	0.003 mg/L	2
EC50	48	Crustacea	>100 mg/L	1
EC50	72	Algae or other aquatic plants	0.18 mg/L	1
EC50	96	Algae or other aquatic plants	0.005 mg/L	2

[1] IUCLID Toxicity Data

[2] US EPA, Ecotox database – Aquatic Toxicity Data

DO NOT discharge into sewer or waterways

Persistence and Degradability – No data available Bioaccumulative Potential – No data available Mobility in Soil – No data available

SECTION 13 Disposal Considerations

Waste Treatment Methods



Product / Packaging	> Legislation addressing waste disposal requirements may differ by country, state and/or
Disposal	territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.
	This material may be recycled if unused, or if it has not been contaminated so as to make i unsuitable for its intended use.
	DO NOT allow wash water from cleaning or process equipment to enter drains.
	It may be necessary to collect all wash water for treatment before disposal.
	In all cases, disposal to sewer may be subject to local laws and regulations and these should be considered first.

SECTION 14 Transport Information

Labels Required

Marine Pollutant NO

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

SECTION 15 Regulatory Information

Safety, Health, and Environmental Regulations / Legislation Specific for the Substance or Mixture

Nickel is found on the following regulatory lists

Chemical Footprint Project – Chemicals of High Concern List

International Agency for Research on Cancer (IARC) – Agents Classified by the IARC Monographs

International Agency for Research on Cancer (IARC) – Agents Classified by the IARC Monographs – Group 2B: Possibly carcinogenic to humans

US – California Proposition 65 - Carcinogens

US – California Safe Drinking Water and Toxic Enforcement Act of 1986 – Proposition 65 List

US – California Substances Identified as Toxic Air Contaminants

US ACGIH Threshold Limit Values (TLV)

US ACGIH Threshold Limit Values (TLV) - Carcinogens

US AIHA Workplace Environmental Exposure Levels (WEELs)

US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs)

US Clean Air Act – Hazardous Air Pollutants

US CWA (Clean Water Act) – Priority Pollutants

US CWA (Clean Water Act) – Toxic Pollutants

US DOE Temporary Emergency Exposure Limits (TEELs)

US EPCRA Section 313 Chemical List

US National Toxicology Program (NTP) 14th Report Part B. Reasonably Anticipated to be a Human Carcinogen

US NIOSH Recommended Exposure Limits (RELs)

US OSHA Permissible Exposure Levels (PELs) – Table Z1

US Toxic Substances Control Act (TSCA) – Chemical Substance Inventory

US TSCA Chemical Substance Inventory - Interim List of Active Substances

Federal Regulations

Superfund Amendments and Reauthorization Act of 1986 (SARA)



Flammable (Gases, Aerosols, Liquids, or Solids)	No
Gas under pressure	No
Explosive	No
Self-heating	No
Pyrophoric (Liquid or Solid)	No
Pyrophoric Gas	No
Corrosive to metal	No
Oxidizer (Liquid, Solid, or Gas)	No
Organic Peroxide	No
Self-reactive	No
In contact with water emits flammable gas	No
Combustible Dust	No
Carcinogenicity	Yes
Acute toxicity (any route of exposure)	No
Reproductive toxicity	No
Skin Corrosion or Irritation	No
Respiratory or Skin Sensitization	Yes
Serious eye damage or eye irritation	No
Specific target organ toxicity (single or repeated exposure)	Yes
Aspiration Hazard	No
Germ cell mutagenicity	No
Simple Asphyxiant	No
Hazards Not Otherwise Classified	

US EPA CERCLA Hazardous Substances and Reportable Quantities (40 CFR 302.4)

Name	Reportable Quantity in Pounds (lb)	Reportable Quantity in kg
Nickel	100	45.4

State Regulations

US California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

 US California Proposition 65 – Carcinogens: Listed Substance Nickel listed.

National Inventory Status

National Inventory	Status
Australia – AIIC / Australia Non-Industrial Use	Yes
Canada – DSL	Yes
Canada – NDSL	No (nickel)
China – IECSC	Yes
Europe – EINEC / ELINCS / NLP	Yes
Japan – ENCS	No (nickel)
Korea – KECI	Yes
New Zealand – NZIoC	Yes
Philippines – PICCS	Yes



USA – TSCA	Yes
Taiwan – TCSI	Yes
Mexico – INSQ	Yes
Vietnam – NCI	Yes
Russia – FBEPH	Yes
Legend:	Yes = All CAS declared ingredients are on the inventory
	No = One or more of the CAS listed ingredients are not on the inventory
	and are not exempt from listing (see specific ingredients in brackets)

SECTION 16 Other Information

Revision Date	06/02/2021
Initial Date	03/26/2015

The data and information as stated was furnished by the manufacturer/vendor/supplier of this product. Alpha Resources LLC cannot warrant the accuracy of this information and shall not be responsible or liable for any damage that may result, should any of the information be erroneous.